Brotherhood of Railroad Signalmen

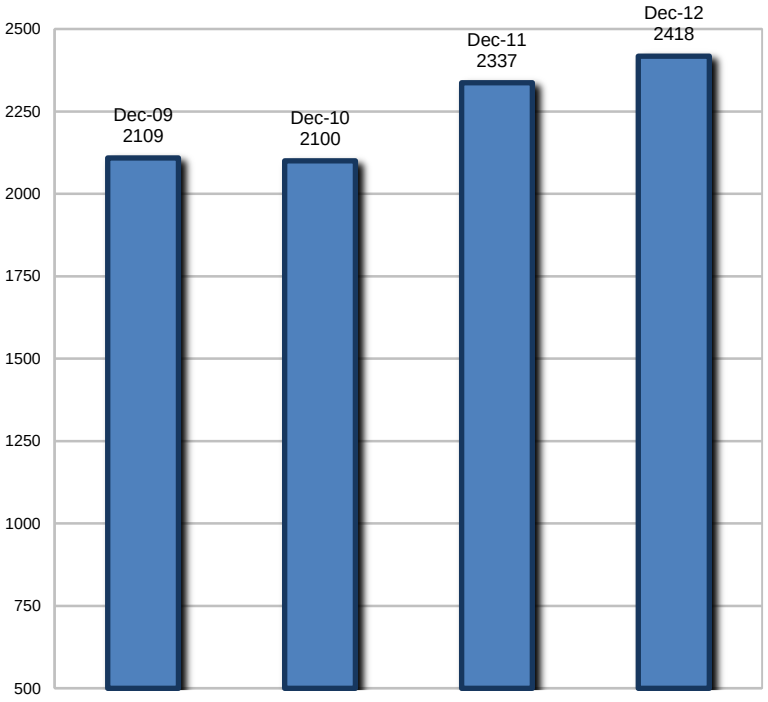
Positive Train Control (PTC)

NTSB FORUM

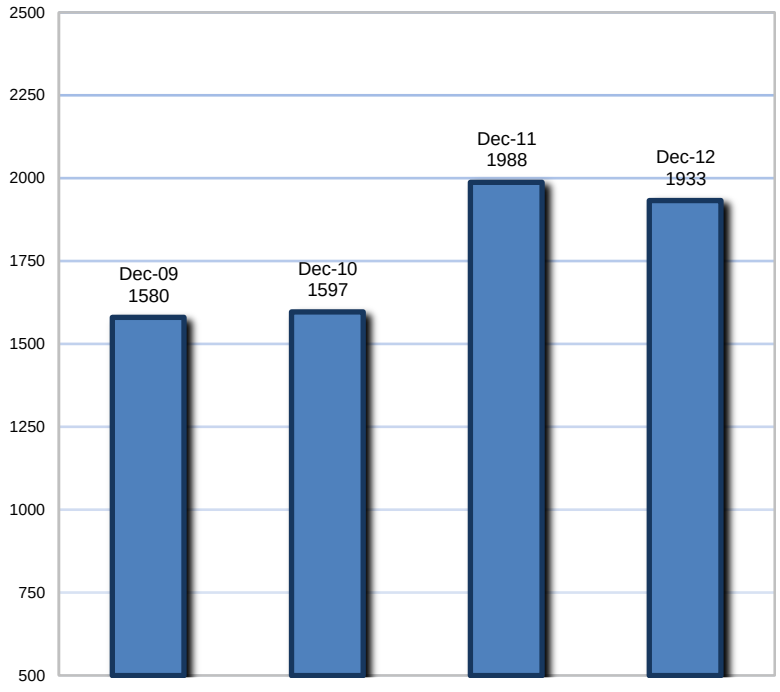
February 27, 2013

Signal Craft Employment Levels by Railroad

Union Pacific (UP)

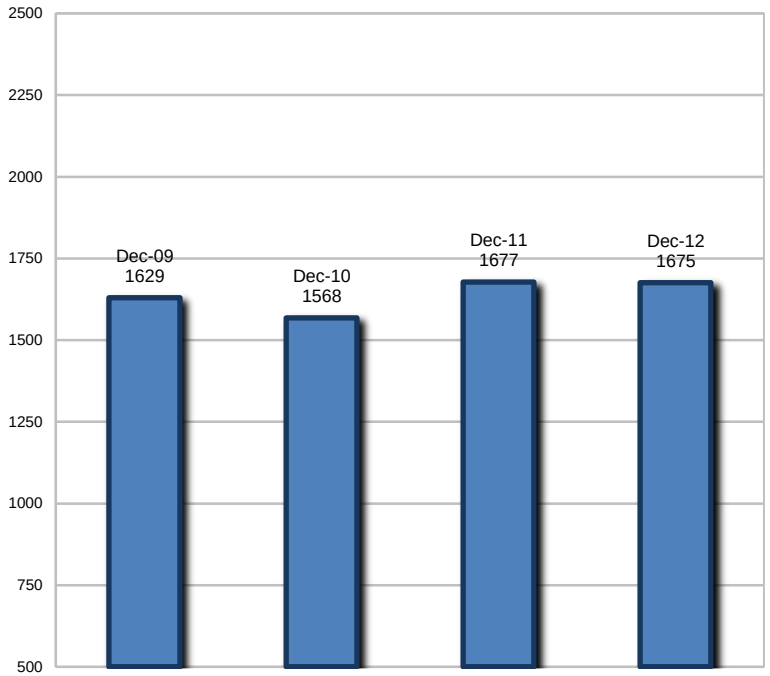


CSX Transportation, Inc. (CSXT)

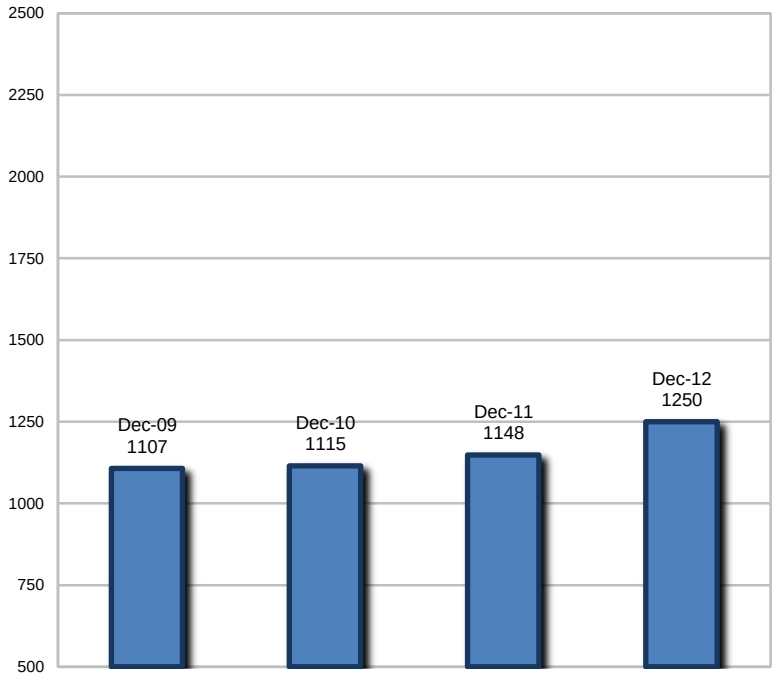


Signal Craft Employment Levels by Railroad

Burlington Northern Santa Fe (BNSF)

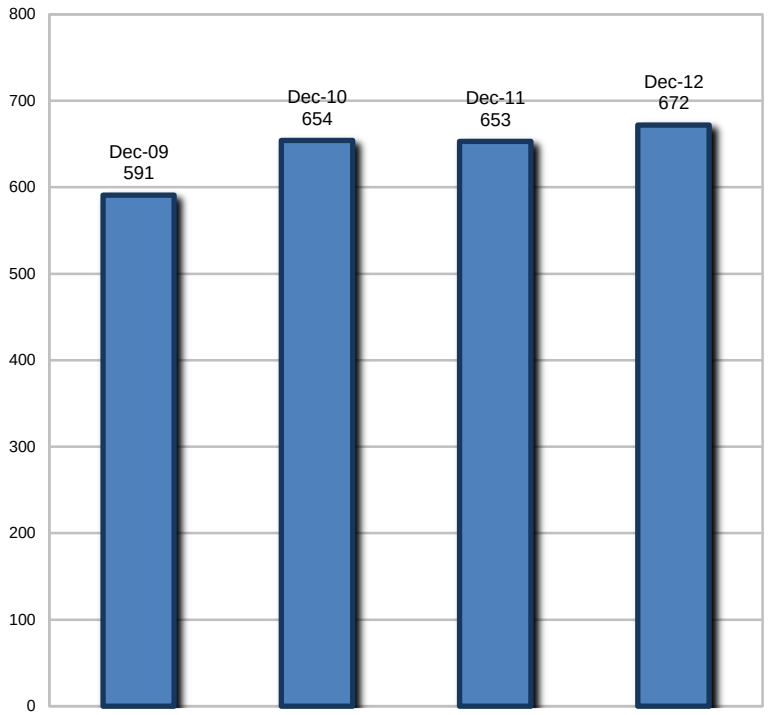


Norfolk Southern (NS)

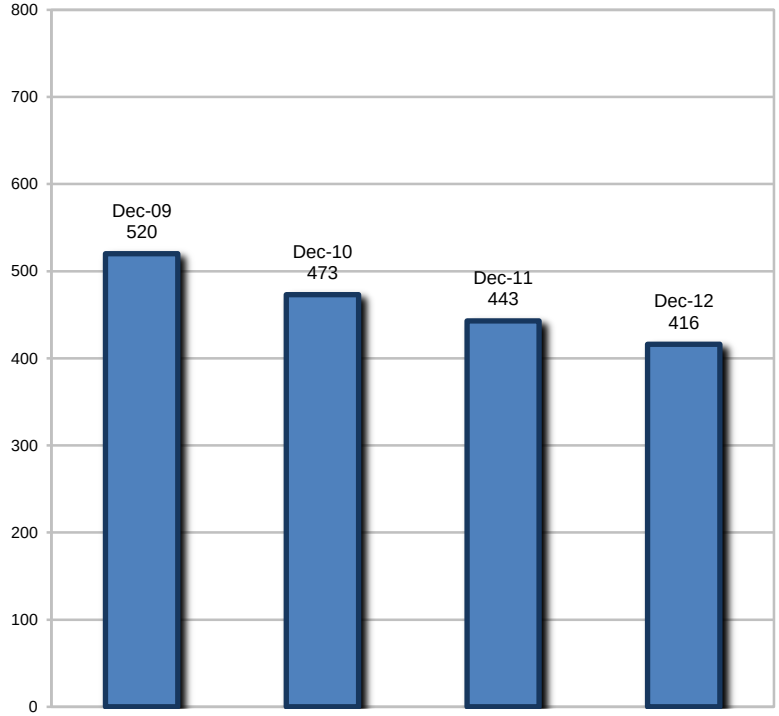


Signal Craft Employment Levels by Railroad

National Railroad Passenger Corp.
(NRPC-Amtrak)

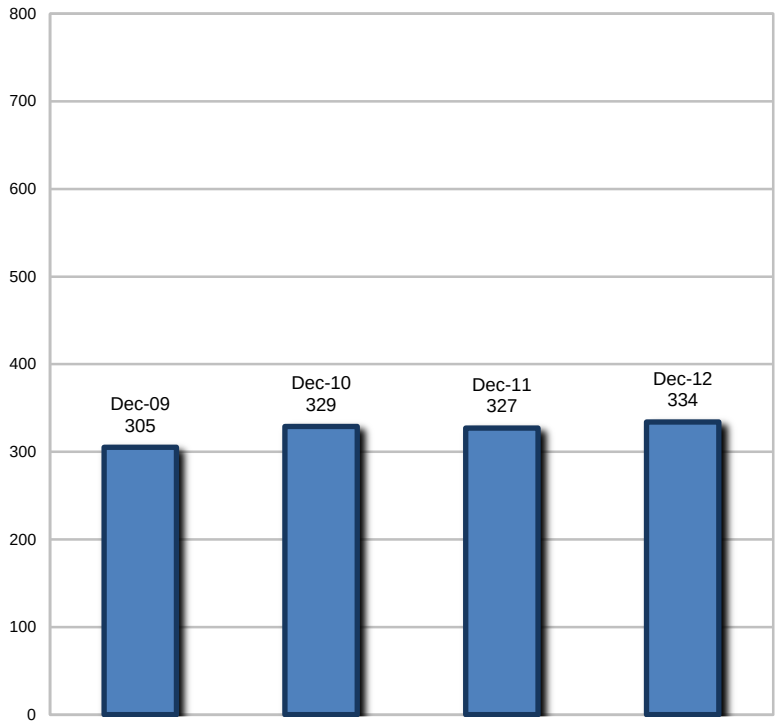


Long Island Railroad
(LIRR)

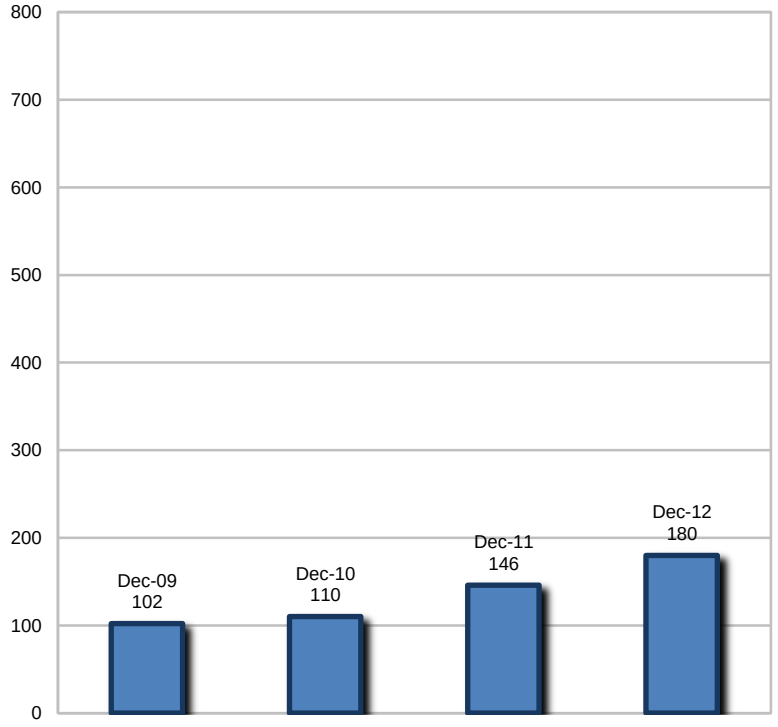


Signal Craft Employment Levels by Railroad

Canadian National (CN)



Canadian Pacific (CP)



Signal Craft Employment Levels

- The railroads represented in the previous graphs were chosen to show a sampling of both class I and passenger railroads of differing size. This is not a complete picture of the entire rail industry; there are a number of passenger and class I railroads not represented in this sampling.
- These graphs show the number of Signalmen working on the listed railroads as of years' end from 2009 through 2012.
- The Rail Safety Improvement Act (RSIA) of 2008, required that, *"…each Class I railroad carrier and each entity providing regularly scheduled intercity or commuter rail passenger transportation shall develop and submit to the Secretary of Transportation a plan for implementing a positive train control system by December 31, 2015..."*
- Based on the requirements of the RSIA 2008, railroads should have begun hiring signal craft employees to meet the required deadline; however, in some cases railroads show only a negligible increase, while others decreased the number of signal craft employees.
- Another factor that plays into the levels of employment is the current, high level of attrition being experienced in the railroad industry. This could partially explain why some railroads showed an increase in signal craft employees. They are planning for the replacement of retiring signal employees, not gearing up for the installation of PTC.
- It should be noted that the railroads have continually stated that this is the largest regulatory required implementation of signaling technology in the history of the rail industry. The hiring levels, based on the amount of track miles requiring the installation of PTC, do not support this statement by the railroads, and it is apparent they are not adequately preparing for this mandate by the deadline of December 31, 2015.

PTC Training of Signalmen

- 49 CFR Part 236 Subpart I requires that, *"Persons whose duties include installing, maintaining, repairing, modifying, inspecting, and testing safety-critical elements of the railroad's PTC systems, including central office, wayside, or onboard subsystems be trained and qualified to perform these duties."*
- 49 CFR §§ 236.1041, 236.1043, and 236.1045 outline the training and qualification program requirements, task analysis and basic requirements, and training specific to office control personnel.
- The Brotherhood of Railroad Signalmen (BRS) reached out to its constituents in the field from each of the listed railroads in the Signal Craft Employment Levels graphs and posed the question: What training is taking place related to PTC?
- While the FRA regulations governing the installation of PTC require that there be a certain level of training and qualification for those individuals engaged in the installation, maintenance, repair, modification, inspection, and testing of PTC systems, to date, there is no evidence of such training taking place. The railroads are severely behind in this area. Training ranges from minimal and deficient to non-existent.
- One of the listed passenger railroads has provided training to its Signal Technicians on the Incremental Train Control System (ITCS); however, it has not provided any training specific to this type of equipment to its Signal Maintainers who interact with ITCS on a daily basis.
- The position of the BRS is that the railroads that are required by law to install PTC systems **must** train their personnel on the installation, maintenance, repair, modification, inspection, and testing of these **safety-critical systems**.

FRA PTC Presentation to Congress

The FRA made a presentation to Congress in August 2012. In that presentation, the FRA made several conclusions. The BRS will address those and give its position on each conclusion.

- The FRA stated that, *"Based on the findings gathered as a result of this report, FRA believes that the majority of railroads will not be able to complete PTC implementation by the 2015 deadline. As a result, FRA recommends that if Congress were to consider legislation extending the PTC implementation deadline it should consider several factors, including the extent to which each railroad has demonstrated due diligence in its efforts to successfully implement PTC technologies on its rail system."*

The BRS is concerned that based on the FRA report, Congress will be led to believe that the majority of railroads should be given an extension and what would constitute a "demonstration by the railroads of due diligence." There are some railroads that have just recently begun the process of installing PTC, does this show due diligence?

- The FRA also stated, *"FRA also recommends allowing for the provisional certification of PTC systems under controlled conditions before final system certification is complete. This will allow for the incremental use of PTC systems and produce an increase in safety as the systems are systematically rolled out. FRA suggests that any revisions to a railroad's PTC implementation plan be subject to FRA approval with sufficient time for FRA to review and significant FRA oversight."*

The BRS questions, how would the determination be made as to which sections of a particular railroad's lines should get the first increment of a PTC system? The FRA stated it would recommend any changes to a railroads PTC implementation plan be subject to FRA approval with sufficient time for the FRA to review the changes. This could possibly delay the installation of PTC even further.

FRA PTC Presentation to Congress

- The FRA then stated, *"FRA recommends Congress consider allowing FRA to approve a railroad to use alternative safety technologies on specified line segments in lieu of PTC, particularly in areas with lower safety risks, if appropriately and properly justified to FRA."*

The BRS is even more concerned by this last statement. Alternative safety technologies of what type. The term positive train control as defined in the RSIA 2008, means, *"…a system designed to prevent train-to- train collisions, over-speed derailments, incursions into established work zone limits, and the movement of a train through a switch left in the wrong position."* What other types of technologies could effectively provide all of these safety requirements?

There may be technologies that could provide some of these required protections; however, one of the main concerns of the BRS is that PTC would provide protection in established work zone limits, while other technologies would not have this capability.

In conclusion, the BRS believes that the installation of PTC by the deadline required by Congressional law must be met. While the railroads and the FRA are quick to mention the cost and its ratio compared to safety, one question the BRS has continually asked is, what is the cost of a human life, and what would be the answer if we asked a family member of a victim lost in either the Chatsworth or Graniteville accidents, for example?

It is the responsibility of all who are involved in the rail industry to make it the safest it can be for the public and those employed in the rail industry.